

POTENTIALS FOR MANAGEMENT IMPROVEMENT



ADDRESS BY  
THE COMPTROLLER GENERAL OF THE UNITED STATES  
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AT THE OFFICE OF MANAGEMENT AND BUDGET'S  
FEDERAL MANAGEMENT IMPROVEMENT CONFERENCE  
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May I first of all commend the Office of Management and Budget for its leadership in organizing a conference of this type. The Office enjoys a unique position in the Executive Office of the President and therefore has a unique opportunity to exercise needed leadership in the management field. I know of the plans to give increased emphasis to management and organizational problems in the newly established office, and I can only offer complete support and say "Congratulations!"

In offering congratulations, I do not wish to make a mistake attributed to the Mayor of South Bend, speaking on the occasion of the Studebaker Company's birthday some years ago on a nationwide broadcast. He was reported to have eulogized: "Studebaker, I congratulate you. For 84 years you have turned out a product equal to few and superior to none!" This certainly would not apply to this conference or to the efforts of the Office of Management and Budget's predecessor agency--the Bureau of the Budget.

The term "management" in a broad sense involves the marshaling of three primary resources--people, money, and physical assets--so as to achieve a specific objective or set of objectives.

Management implies action; requires affirmative attention by the manager; and cannot succeed, for long, if a

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manager plays a passive role. Action by a manager must be based on available information--reliable or unreliable, complete or incomplete--concerning the resources at his command and their utilization, concerning the environment within which he must put these resources to the task of meeting desired objectives, and concerning the extent to which the objectives have been or are being met.

It may be a truism to say that the manager must assess this information and act in the manner which will do the job most effectively and efficiently.

However, I cannot stress too much that complete and reliable information is a key to sound management. I will not say that management decisions cannot be better than the information on which they are based, because this anomaly does happen. Nor will I say that reliable information ensures sensible decisions, because often this is not the case. But the proposition that the overall effectiveness of the manager can be strengthened by improving the adequacy of the information upon which he must make his judgments cannot be questioned seriously.

As a corollary, in making decisions managers must have the ability to obtain and use effectively the best information available. A manager, chosen for this ability, must be convinced of the worth of the objectives sought, must believe that he plays an important part in their achievement, and must know that he will be rewarded through appropriate recognition commensurate with his success in using efficiently the resources at hand to accomplish the objectives sought.

These propositions apply at all management levels in every type of endeavor. Where do we, in the Federal Government, stand in relation to giving them full effect? Where are the areas in which we must do a better job?

I would like to discuss two broad areas of management--management for program objectives and management of resources--and to suggest some methods or techniques which seem to warrant particular consideration.

#### MANAGEMENT FOR PROGRAM OBJECTIVES

A sharp and precise statement of objectives is essential to effective management of any program. This statement is the basic device by which the manager communicates his ideas and thoughts to the staffs that are to do the work. It sets objectives which the staff must strive to fulfill.

Those objectives must be well thought out and clearly stated. If not, the staffs may not do the work which the manager intended. It is as simple as that. Worse yet, they may pursue entirely different end results. Vagueness or ambiguity in the statement of the objectives can result in indecision and frustration. Staffs cannot be expected to perform satisfactorily without a clear understanding of their purpose or goal.

A clear understanding of objectives is also necessary for the manager himself, so he can design the activity to accomplish the desired result. He must also create an organization, develop policy guidance for the conduct of activities, and assign responsibilities to the operating staffs.

The manager must also provide the system and mechanics for monitoring the performance of the organization and individuals concerned and their success or progress toward the objectives. In essence, this requires a continuing measurement of their performance to see how they are progressing toward their established goals and bench marks.

Productivity measurement is an essential management tool. It should be used as a positive tool, not a negative one. Productivity is an index of progress in the way resources and efforts are organized. Used in conjunction with other improved management techniques, it can contribute substantially to the general upgrading of management.

Needless to say, Government activities are conducted because there is a need for whatever they provide or accomplish, i.e., outputs. The productivity of those activities is, therefore, a prime management concern. Thus measures for productivity must be developed.

The productivity actually accomplished must also be evaluated. How does it compare with the goal, if one has been established, or with the results last month, or last year, or with the performance of a similar activity at another location. Of course, you can't always realistically determine what the productivity should be. Obviously it is generally desirable to establish goals. Even if they are somewhat imperfect at first, they will tend to become more realistic with experience and evaluation of results. There is frequently a tendency to give up on the use of productivity measurements and goals because of their lack of perfection. However, good management cannot abandon its basic responsibility to monitor the productivity of its assigned activities.

## MANAGEMENT OF RESOURCES USED

Government activities require extensive use of such resources as personnel, property, and funds. Management has the responsibility of caring for those resources and using them in an economical manner. It must see that:

- personnel resources are not wasted,
- property is not used inefficiently or lost,
- money is not spent needlessly,
- revenues or benefits which should be derived from the activity are in fact obtained, and
- controls are maintained over the liabilities incurred--liabilities for which the Government must make payment.

One of the most important resources used is personnel. It is also probably the most difficult to manage effectively and efficiently. Personnel costs are high; also they are an extremely important element in the control over, and effective use of, all other resources devoted to the activity. For this reason, top management must try to get the active participation of employees all up and down the line in the "management" function.

The familiarity of the employees with what actually goes on enables them to contribute to management as well as to exercise their ingenuity and initiative to promote effective management. One of the tasks of the manager today is to provide maximum incentives for the employees to work for better management--through recognition of the contribution they make as both individuals and groups and through reward for their contribution by giving them increased responsibility.

## RESOURCEMENT MANAGEMENT

Consumption of resources, if possible, should be related to productivity and normally to a financial plan. The use of

operating budgets is a classical use of a plan for financial control over the use of resources. Both techniques need to be considered fully and used where possible. Obviously, mere conformance to a financial plan without consideration of the productivity derived under that plan does not effectively discharge management's responsibility.

#### INFORMATION SYSTEMS

Effective management requires systematic reporting on the results accomplished and resources used--preferably compared with established goals or standards of performance. Those goals or standards could be the number of units produced, conformity with a financial plan, pounds of scrap per widget produced, tons of coal consumed per unit of production--any one of an almost endless variety of measures. The information system should measure both productivity and efficiency and should be designed to flag the exception or departure from acceptable performance--to identify the problem areas in need of attention, the drop in efficiency or productivity--or whatever aspect of the activity that should be of concern to management.

Computers afford tremendous opportunities for sophisticated and useful management information systems.

#### ACCOUNTING SYSTEMS

A sound accounting system is also essential to effective management.

As Comptroller General, I am directed by law to prescribe the principles, standards, and related requirements for accounting to be followed by all executive agencies. We also have a duty to cooperate with the agencies in developing their

systems and to approve them when we consider them satisfactory. Further we must review them in operation from time to time.

Reliable accounting systems enable sound financial reports--an essential ingredient of effective management.

Reliable accounting makes it possible to pinpoint costs, identify weak and wasteful operations, provide comparative costs, and relate costs to program activities. It should measure the effectiveness of management and the effects of corrective actions, flag areas requiring concentrated attention, and help in many other ways to promote better and more economical operations.

Better Federal agency accounting is one of GAO's important objectives--one that we have to keep working toward throughout the Federal establishment. It requires overcoming such obstacles as resistance to change, lack of personnel with the needed skills, and lack of managerial sophistication in the use of cost and financial information as an instrument of control.

#### INTERNAL AUDIT

Internal audit or internal review--or whatever name it carries--is also an invaluable tool to management.

We have urged the strengthening of the internal audit function in the Federal agencies over the years. The expansion in recent years of internal auditing in the agencies is due, in part, to our strong endorsement of this function. Our advocacy is based on the precept--recognized by the Congress itself--that it is the agency management which is basically responsible for agency activities. To discharge that

responsibility, the agency needs an effective internal audit. To be effective, the internal audit

- must be independent of the activities examined,
- must be broad in the scope of its review and be directed particularly to known or potential problem areas, and
- findings must be given proper attention by top management.

It is important that operating officials have a proper attitude toward the internal review activity. There is a corresponding need for the internal reviewers to be fair and objective in their examinations so that they will have the respect and cooperation of the operating people. Operating people do not always wholeheartedly accept the presence of internal reviewers. This attitude can seriously impair the internal review function as well as the ease with which it is carried out. Top management has the right to expect, and should insist, that both the reviewer and the reviewee fully support the common objective of promoting the best and most productive operation possible.

#### PLANNING-PROGRAMMING-BUDGETING

No discussion concerning management would be complete without mentioning planning, programming, and budgeting. This concept, which had worked well in the Department of Defense, was prescribed by the President in August 1965 for use in all major Federal agencies.

It was to be used for three essential purposes:

- . To define national goals and identify those considered most urgent.

- . To determine alternative ways of attaining those goals and the probable costs.
- . To improve performance by attaining the best possible program return for each dollar spent.

Stated another way: PPB is a method for analyzing and deciding on programs in terms of measured results related to costs. It is a system:

For dealing with difficult problems of choice by considering alternative objectives and programs.

For defining programs, outputs, and resource requirements with increased precision.

For developing multiyear planning of desired objectives in relation to systems costs.

For carefully considering the benefits and costs of existing programs and for comparing alternative courses of action.

Since 1965, installation of PPB systems has moved steadily forward under the direction of the Director of the Bureau of the Budget--more recently the Office of Management and Budget.

In some agencies the system has contributed to more effective management and more efficient program operations. In others, it appears more a promise than a reality. As indicated earlier, the Defense Department has been in the vanguard in applying the new analytical techniques involved in PPB. There the classic application of these problem-solving approaches has focused on the complexities of force structure and support. These things are more readily quantifiable. For

example, planners can evaluate whether a given quantity of airplanes, weighing a given tonnage, and costing a specific amount to produce and support can fly a given distance in a specific time and penetrate enemy defenses with a specific number and tonnage of bombs. The planners can also evaluate the same kind of information about the cost and capability of one or more missiles to do the same job. They can then compare the relative effectiveness with the related cost of bombers vs. missiles and thus furnish our top military command with bases and data for rational decisions about force structure.

In many cases, the solution of these and other difficult problems, such as the evaluation of alternative goals and the identification of the best means of achieving the goal selected, will take time. But the problems must be addressed, and the big contribution of PPB is to bring these problems to the surface and set in motion the required chain of problem-solving events.

A note of caution on the PPB system is needed, however. There is nothing magic or selfexecuting about this or any other management system. PPB must be applied carefully and properly, recognizing that experience and judgment must play a vital, if not decisive, role in decisionmaking. It is a tool--nothing more--to supply the facts and the discipline for analyses essential to more effective program decisions.

However, the potential, significant improvements in the allocation of resources associated with PPB make it essential that we take whatever steps are necessary to have the trained employees available and to develop the improved analytical techniques.

Certain members of the Congress have indicated an interest in making fuller utilization of PPB in the review of annual appropriations.

There is no way that you can develop a system such as PPB, in my opinion, that will resolve the basic priorities among different broad purposes of Government. In terms of specific programs and specific objectives, however, PPB can play an important role. It can help you to select proper alternatives and to develop an analysis which will project for you the long-term consequences of those alternatives in terms of achieving the greatest output. Whether we continue to call it PPB or program budgeting, or what have you, this basic type of analysis is essential to appraising alternative ways of attaining national goals.

From what I have said, it is fair to conclude that we might have done better to have approached the PPB directive on something less than on an across-the-board basis. The situation may be analogous to that cited in a story attributed to Secretary of Commerce Stans--Maurice Stans--who, as you know, is also famous for his several safaris in Africa. As the story goes--

A big-game hunter was on his way back to camp one evening when an enormous tiger appeared out of the jungle, not 20 feet away. As the tiger was about to spring, the hunter fired his last cartridge and missed. The tiger sprang too far and landed 15 feet beyond the hunter who then ran for camp and got there safely.

The next day the hunter went behind the camp to practice a little shooting at close range. He heard a strange noise in the brush and went to investigate. It was the tiger--practicing short leaps!

GAO VIEWS ON POTENTIAL  
MANAGEMENT IMPROVEMENT AREAS  
IN GOVERNMENT ACTIVITIES

I can't give you an overall evaluation of management practices within the Government, or even within one department or agency. But I will try to give you some views on particular activities within the Government where, we believe, there is a great potential for improvement.

Computer problems

The managers of today are fortunate in being able to obtain needed information on a timely basis by the use of electronic equipment. Its speed and accuracy--with proper programming and input--is amazing.

Literally billions of dollars are spent annually in buying and using computers, and the end is not in sight. Computers have made possible many significant technological advancements. However, a high percentage of computer installations have been found seriously lacking in important respects.

Feasibility studies have been inadequate; capability has been overprocured; output utilization has, in some cases, been scant; necessary interface of systems and programs have been neglected; and cost-effectiveness calculations have been slanted by the siren lure of sophistication. These and other problems of computer management must be addressed if our society is to obtain maximum benefit from these highly sophisticated creations.

On July 1, 1970, I spoke before the Subcommittee on Economy in Government, Joint Economic Committee, concerning the need for procurement procedures which would afford free and full competition to all qualified potential bidders, including the small manufacturers of peripheral equipment.

The reviews we have made support the Committee's recommendation that the General Services Administration should make it possible for smaller manufacturers of ADP equipment to furnish part of the Government's requirements. Specifications should not be designed around specific products with the effect of eliminating competition and stifling the incentives of smaller manufacturers. Our studies of the potential savings available by the acquisition of peripheral equipment from independent manufacturers showed that, if compatible components were rented from independent manufacturers rather than from systems manufacturers, annual savings would amount to at least \$5 million. We estimated that, if such components were to be purchased, they could be purchased for \$23 million less from the component manufacturers than from the systems manufacturers.

Executive agencies have been and are now required to submit information on their computer resources in accordance with Bureau of the Budget Circulars A-55 and A-83. Our reviews have shown, however, that the reporting system does not produce the accurate, complete, and useful information needed for proper management decisions on procurement, utilization, and reutilization of ADP resources. More realistic and timely projections of acquisitions and releases of equipment are needed to improve reutilization and Government-wide contract negotiations and to prevent unneeded purchases. More information on software and its use in Government operations is needed to reduce duplication of effort and unnecessary costs.

Financial management problems

Some operating managers tend to look upon financial management as just another "thorn in the side," interfering with

their day-to-day operating responsibilities. It is too bad, perhaps, that we must worry about money--it would be great if we had so much that it wasn't a concern in, or a limitation on, reaching our objectives. But the competing needs for our limited resources make it essential that we put money to the best use and stretch it as far as possible. That's what financial management is all about, and, despite the current disdain for our materialistic society, good financial management is essential.

It is the means of directing our resources to the objectives determined to have the highest priority; the safeguarding of those resources to prevent their loss, theft, or waste; the stretching of those resources to do the most good-- in essence, the technique of getting the most out of what we put in. It includes identification of what is to be done, what we have to do it with, and what more is needed, as well as monitoring of the use made of those resources and their productivity.

A good financial management system will provide the information needed for the manager to function. He must recognize its value and know how to use it. Those responsible for the system must see that it provides this service.

The importance of  
work measurement development  
to financial management

As previously stated, financial data becomes much more useful when it is associated with appropriate nonfinancial data. How meaningful is it to know that a given organizational unit cost \$300,000 this year compared with the cost of \$350,000 last year for an organizational unit with the same

title? The two units may be alike in title only, for there may be different workloads and different objectives. However, when comparable work measurement units are used to express financial data in terms of unit costs, real meaning is brought to the financial data.

Our experiences in the Department of Defense with Project PRIME are a case in point. This financial management system was well conceived, and it is producing quantities of financial data--more than some levels of management can use effectively. Management cannot fully use the data until it is possible to align the financial data with meaningful work measurement units.

#### Control of Federal grant-in-aid programs

It would be hard to find an area of Government activity today with problems of financial management more pressing or more difficult than Federal grants-in-aid. From rather modest beginnings, quite a long time ago, this means of assisting the financing of services provided by State and local governments has reached gigantic proportions.

This growth is the result of political decisions made in response to problems brought on by technological, economic, and sociological changes in society. In 1968 Federal grants-in-aid amounted to about \$18 billion a year, an increase of about \$13 billion in the 10-year period from the beginning of 1959. Federal grants-in-aid are now running over \$27 billion a year, or over 13 percent of the total Federal budget, and represent an increase of over \$9 billion in the last 2 years. Apparently this form of assistance will continue to grow, unless major changes are made in our system of financial services to be performed by governmental bodies.

The Federal Government has been drawn into the picture because of its financial resources and concern for the general welfare of the residents of all States, as well as the fact that certain problems transcend the jurisdiction of individual State and local governments.

A major problem facing Federal managers is the need to strengthen the audit function at State and local levels. Some States have developed good audit programs which serve to assist in the management of State government operations and at the same time provide an extension of the Federal audit effort which benefits the Federal manager. Some States have audit programs which are in a developmental status. However, others are still making primarily voucher-type audits, which are helpful but which do not provide appraisals of efficiency of operation or of extent of compliance with prescribed requirements.

Many public accountants, who perform the bulk of the work for cities and counties, see their responsibilities as being related only to the fairness of financial statements. Most do not perform operational or management audits, nor are they urged by their clients to do so.

Last October, under an agreement with the Bureau of the Budget, the General Accounting Office assumed responsibility for a project of directing the organization and operation of an interagency working group to develop standards and guidelines for the audit of Federal assistance programs.

The long-range objective of this effort is to improve program operations through improved auditing by Federal, State, local, and outside agencies and through effective coordination between them.

Management problems similar to those in the Federal grants-in-aid to State and local governments are also present in programs where U.S. aid funds are turned over to international organizations and lending institutions.

Federal assistance programs probably will increase in the future, and there will be a corresponding need for more effective management of these programs.

#### Measuring human productivity

Much of our recent work has indicated to us that managers everywhere are developing new or increased awareness of the importance of human effort as a critical resource. As one Defense official recently observed, so much attention has been given to money as a resource that the term "financial management" and its concepts are well defined and are widely accepted, but comparatively little attention has been given to manpower as a resource. We agree that the time is ripe to build some "manpower management" concepts.

This is not meant to imply that nothing is now being done. Many projects have been undertaken that appear to be solid groundwork for a new direction. There are many indications that agency management is giving intensified attention to such matters as staffing standards, performance appraisals, performance goals, and personnel training and development. These are needed for better manpower management.

However, most of these concepts and techniques have been in the area of measures of productivity of people in physical operations. Little has been accomplished in measuring productivity of people engaged in administrative work. This problem has, to date, not been resolved and constitutes a real challenge for management.

Our work in the manpower area has demonstrated the significance of manpower factors in program management. We are convinced that there is a constant need for more emphasis on manpower training as an essential part of an agency's overall management.

Some factors affecting manpower are within the control and authority of operational managers. Others are controlled from the outside or from higher levels. One of the most obvious of the controls beyond the discretion of managers is the ultimate limit on resources which can be made available. The most familiar is personnel ceilings or limitations or, more recently, the hiring limitation imposed by the Revenue and Expenditures Control Act of 1968. There is also the overall limit on money which comes down to the managers through budgetary processes.

Availability of skills within our total national manpower resources is also an important limitation. This scarcity causes competition for services in which compensation, mobility, fringe benefits, and job challenges are important considerations. This critical resource requires management's close and continuing attention.

#### Cost reduction-value engineering problems

Recently we were asked for our observations and suggestions concerning statements to the Chairman, President's Advisory Council on Management Improvements, relative to the results of Congressman Larry Winn, Jr.'s survey of the effectiveness of cost reduction programs and on the current degree of utilization of value analysis-engineering within the Federal Government. We share Congressman Winn's view that

more can be done to promote cost reduction-value engineering programs within Government agencies.

Because of the significance and the long-range nature of the cost reduction program, we reviewed the operation of the program in five departments and agencies. Our objective was to consider possibilities for improving the program. We concluded that a cost reduction program is a useful tool of management in developing cost consciousness in employees and in motivating the development of cost-saving ideas and techniques. We noted that in some departments and agencies the program had been aggressively implemented but that in others little effort had been made to use the program forcefully for the purposes intended.

In 1969 we furnished to the Congress our observations on opportunities for increased savings by improving the management of value engineering performed by Department of Defense contractors. The Department had reported value engineering cost reductions of about \$170 million for the 5 fiscal years through 1968. Many contracts under which value engineering effort was voluntary, however, had not produced the desired results.

The contractors had not been stimulated to develop proposals to reduce costs of design and manufacture of products even though they would share in the cost savings.

We believe that new techniques are needed to stimulate the interest and participation of contractors in value engineering. For example, improvements in the value engineering performance of contractors can be achieved if Department of Defense officials will identify specific programs that are

most susceptible to value engineering and will suggest to contractors that they concentrate their efforts on these programs.

Value analysis-engineering and cost reduction programs is needed to ensure that opportunities to reduce costs are identified and implemented.

## Defense procurement problems

During past and present GAO examinations in the research and development areas, we have found opportunities for improvement in the management of the development and procurement of Department of Defense weapon systems. Improvement is needed (1) in the generation and approval of specific performance, schedule, and cost requirements for the end-items and (2) in the commitment of material to production and use prior to the completion of development, as evidenced by satisfactory results obtained in all necessary tests.

The first of these problem areas is more simply termed "requirements determination." The second of these areas is commonly referred to as concurrent development and production, or concurrency. These two problem areas are regarded as the basic causes for most of the substandard performance, schedule slippages, and cost overruns which have occurred, and continue to occur, on major weapon systems.

Deputy Secretary of Defense David Packard emphasized these problems in a memorandum in July 1969 to the Secretaries of the three military departments. He pinpointed three areas of immediate concern: (1) cost growth, (2) a need for increasing insistence on hardware demonstration with less dependence on "paper analysis," and (3) widespread deficiency in the amount of test evaluation of weapon systems prior to the commitment of significant resources to production.

Mr. Packard further emphasized the need for improved management in his address to the Armed Forces Management Association in Los Angeles last month. The major thrust of his message was that:

1. Defense should be buying only what it actually needs--not what industry or anyone else thinks it can develop.
2. The Department has been overly optimistic on cost estimates and overly demanding in its requirements.
3. Industry has been unrealistic in its promises with respect to performance and cost.
4. If the Department and industry do not take needed steps, the Congress will try to take them--probably by inflexible rules that wouldn't necessarily provide the best solution.

We have emphasized examinations of the problem areas since early 1967, and the results of this work have been given extensive coverage in congressional hearings and in discussions on the floor of the Congress. The receptivity of the Department of Defense to the results of this work has been excellent.

We shall continue to emphasize management improvement opportunities in our reviews of Defense procurements.

#### Commission on Government Procurement

In November 1969 the Congress established the Commission on Government Procurement to conduct broad studies of the Government's current procurement statutes, regulations, policies, and procedures.

In our opinion, Government procurement is so burdened with complex statutes and regulations and is so interrelated with other governmental, social, and economic programs and policies that substantial improvements can be made which would benefit both Government and business. We believe that the problems have grown out of the following factors.

- In general, the piecemeal evolution of Federal procurement law was designed to solve or alleviate specific, and sometimes narrow, problems as they arose.
- Federal procurement statutes are chiefly concerned with procurement authority and procedures and do not contain clear expressions of Government procurement policies.
- Implementing procurement regulations are voluminous, exceedingly complex, and at times difficult to apply, and they have great impact on the rights and obligations of contractors.
- The level of spending for Government procurement is high. For fiscal year 1968 the Department of Defense alone awarded contracts totaling about \$43 million for supplies and services which represented about 80 percent of total Government procurement expenditures.

We will give our full cooperation and assistance to the Commission during its study.

#### CONCLUDING REMARKS

I have attempted to outline, in general terms, some of the potentials for improvement in the management of Government activities today. Much of what I have said is not new. But I have dealt with areas which, I believe, are fundamental and need underscoring and emphasis. That, I believe, is the central objective of this conference.

These and other improvements are urgently needed. They are basically your responsibility. We in GAO will do all we can to help by examining into problem areas and assisting in finding solutions. Experience has demonstrated that we can be helpful in the difficult task of managing Government operations. But the major burden of identifying and correcting management problems is yours.